

## THE TRANSIT OF VENUS.

### ELABORATE PREPARATIONS MAKING AT NEW-HAVEN.

NEW-HAVEN, Dec. 2.—Yale College will make a special study of the transit of Venus on Wednesday at its new observatory, where there has just been placed in position one of the finest heliometers in the world, and the only one in the United States. The instrument will be operated by Dr. Waldo, who has charge of the Horological Bureau, and Prof. Newton, the eminent mathematician, will probably be present. An equatorial telescope having an eight-inch aperture with a ten-foot focus, will be operated by Mr. Wilson, an assistant at the observatory. At the scientific school the nine-inch equatorial will be manipulated by O. T. Sherman. The astronomer who went on the Howgate expedition, Prof. C. S. Lyman, who had the honor of first observing the complete outline of Venus in 1866-7, will take an observation of his own. The Professor said to-day that a beautiful sight will be presented by Venus the day before and the day after the transit. It can be seen through a spy-glass pointed close to the sun and by the edge of a chimney or other obstruction so as to keep the great part of the sun out of the field. A delicate silver thread of light will disclose the outline of the planet. This is rarely seen. It can be noticed just before the transit when the planet is  $1^{\circ}$  or  $1\frac{1}{2}^{\circ}$  away, and just after when it has emerged to the same distance. Prof. Lyman saw it in 1866 when the planet approached within  $1\frac{1}{2}^{\circ}$  of the sun's limb. He also saw it in 1874. This appearance is now of no value to astronomical science, but is worth watching for its beauty. The Professor thinks the value of the transit observations was not so great in 1874 as anticipated, and that therefore nothing remarkable is looked forward to as a result of Wednesday's observations. The parallax of the sun is obtained, and in a much more accurate manner by observations of Mars and one or two asteroids northern and southern bearings, with eastern and western observations.

ALBANY, Dec. 2.—Mr. R. H. Tucker, astronomer in charge of the Dudley Observatory, has erected a hut at the Coast Survey Signal station in the Helderbergs, about five miles from New-Scotland, from which he proposes to make observations of the transit of Venus. The record of the transit will also be taken at the Dudley Observatory here.